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EXAMINER

NGUYEN, DANNY

ART UNIT PAPER NUMBER

2836

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,123

Applicant(s)

HOOPES, GERALD B.

Examiner

Danny Nguyen

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1-4, 15, 17, 18 are rejected under 35 U.S.C. 102(a) as being anticipated by Chaudhry (U.S. Patent No. 6,188,557).

Regarding to claim 1, Chaudhry discloses that the shunting surge protector (220) comprises a metal-oxide varistor (238) which has two electrodes to a power line at a location adjacent to a building entrance (see col. 1 and 2, lines 63-2), one electrode being connected to a power line (line 222); a gas-discharge tube (240) has a line electrode connected to other electrode of the metal-oxide varistor (also see fig. 6), wherein the surges shunted to the ground (226) through the metal-oxide varistor (238) and a gas discharge tube (240).

Regarding to claim 2, Chaudhry discloses the first varistor (238) connected to the power line (222) through a series-connected fuse (228).

Regarding to claim 3, Chaudhry discloses the protection circuit comprises a second metal-oxide varistor (326) having two electrodes and the gas discharge tube (334) has a second line electrode connected to the electrode of the second varistor (332).

Regarding to claim 4, Chaudhry discloses the second varistor (332) connected to the power line (304) through a series-connected fuse (324).

Regarding to claims 15, 17, 18, Chaudhry discloses that the shunting surge protector comprises a protector sub-circuit, the sub-circuit comprised of a metal-oxide varistor (238) and a gas discharge tube (240), the varistor and the discharge tube connected in series between the power line (222) and the ground (226) whereby surges shunted to the building ground through the metal-oxide varistor and the gas discharge tube (see fig. 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5, 6, 8, 10, 11, 13, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhry in view of Hershfield (U.S. Patent No. 4,677,518).

Regarding to claims 5, 8, 10, 13, Chaudhry discloses that the shunting surge protector (fig. 6) comprises a first metal-oxide varistor (238) which has two electrodes, one electrode being connected to a first power line (222); a first gas-discharge tube (240) has a line electrode connected to other electrode of the first metal-oxide varistor and a ground electrode connected to a ground (226); surge on the first power line (line 238) are shunted to the ground through the first metal-oxide varistor (238) and the first gas discharge tube (240); a second metal-oxide varistor (236) has two electrodes, one

electrode being connected to a second power line (224). Chaudhry does not disclose a second gas discharge tube. Hershfield discloses a second gas-discharge tube (106) (see fig. 6). It would have been obvious to one having skill in the art to modify the protection circuit of Chaudhry with a second gas discharge tube in order to prevent transient on the power lines (Hershfield, col. 5, lines 61-65).

Regarding to claims 6, 11, Chaudhry discloses that a capacitor (320) is connected between the two power lines (104).

Regarding to claim 14, Chaudhry discloses that the inductance is less than 2.5 microhenries (col. 9, line 31).

3. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhry in view of Kapp et. al. (U.S. Patent No. 5,412,526). Chaudhry discloses all limitations of claim 1 except for each of the metal-oxide varistor being connected as claimed. Kapp et. al. discloses each of the metal-oxide varistor (72,74) being connected to a power line (62, 64) through a series-fuse (66, 68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify each of the metal-oxide varistor being coupled to a power line through a series fuse of Chaudhry as taught by Kapp et. al. in order to limit surge currents flowing through the circuitry so that they are not damaged by surge (Kapp, col. 1, lines 49-50).

4. Claim 12, Chaudhry discloses all limitations of claim 8 except for the protection circuit being open when voltage being greater than 10 kilovolts and 40k amperes. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to select any known values of voltage and current as deemed suitable in order to provide a high and frequency in the desired range to reduce transient voltage.

Allowable Subject Matter

5. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9318 for regular communications and (703)-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

DN

DN

April 21, 2003



BRIAN SIRCUS
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